Infantry School



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Current as of 01 Aug 06

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The Canadian Infantry School's Austere AOFP Briefing





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Purpose of Combat Fitness

Your physical fitness levels must be at a point where it is no longer a consideration. You are not fit in order to survive; you are not fit to excel at a physical task; you are fit because it allows you to bring to the battle that critical component of being a Commander and a Leader. You are fit because you must retain the greatest ability to lead, command, to inspire, to think, to plan, and to accomplish your mission. Everything else is for show, and therefore

meaningless. D.M. Day





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<u>Aim</u>

The aim of this briefing is to present an overview of the Infantry School's Austere AOFP project conducted with DP 1.2, 2006









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- "In combat there are no weight divisions, there are no gender regulations, there are no referees, there is usually just one round, and that round is often really really short. In combat there is no true consent. Preparation is based on theory and anticipation. There truly are no rules. When something goes wrong, it goes wrong fast. There is no padded floor or mouth guard, no doctor standing outside the ring."
- Tony Blauer









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CDS DIRECTION FOR PHYSICAL FITNESS

CANFORGEN 198/05 CDS 104/05 211441Z DEC 05

This is not about fitness testing, <u>it is about helping to set</u> <u>the conditions for success in operations</u>. I am convinced that adherence to a physical fitness program will not only increase strength, energy and endurance, but also <u>improve an individual's ability to cope with mental and</u> <u>emotional stresses.</u>





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<u>AGENDA</u>

- Intent of the AOF Austere Program
- Overview of the DP 1.2 AOFP Austere Program
- Weekly breakdown
- Testing Protocols
- Candidate perceptions
- Injuries
- The way ahead
- Conclusion







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THE IMPORTANCE OF FITNESS

 The insurgents had been fighting since ten in the morning, and they LACKED THE CONDITIONING of the Marines. Twenty-one Marines were treated for heat exhaustion, and the figure was probably far higher among the insurgents.

No True Glory, Bing West. 2005







Intent of the AOF Austere Program

The intent of the Austere AOFP is to provide soldiers with an operational fitness routine that will produce the required physical, mental, and emotional fitness to be effective in today's contemporary operating environment. The program is designed to be flexible and utilized while in garrison, the field, or deployed to austere environments with only common military equipment and readily available local resources (rocks and sand)



DP 1.2 Program Overview

- Seven weeks of PT sessions
- Three weeks dedicated to testing and instruction
- Four weeks for workouts (two weeks of four had field deployments)
- 15 total PT sessions
- 23.6 km total distance ran
 - Longest: 8 km 50 min run
 - Shortest: 1200m (3 x 400m)





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Weekly Breakdown

- Week 0 PT, AOFP, and Obs Crse testing
- Week 1 Instruction of exercises
- Week 2 5 workouts
- Week 3 2 workouts
- Week 4 3 workouts
- Week 5 5 workouts
- Week 6 Second testing





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Instructors

- Anglo platoon averaged 3-4 CrossFit certified instructors and the Franco platoon 1 CrossFit certified instructor
- The trg Company had a total of four internal CrossFit instructors and a further three instructors assisted from the Inf Sch AOFP/CrossFit Cell
- All instructors for both platoons met the criteria listed for fitness leaders in Ch 1, pg 17 of the AFM



All candidates experienced the same living conditions, diet, and training program.





Testing Protocols

- The effectiveness of the austere program was gauged using the following measures:
 - Physical testing PT test, AOFP test, and Obstacle course
 - Student perceptions of the programs
 - Injury rate





Testing Protocols

- Testing was conducted the first and last week of PT phase
 - DP1.2 seven weeks of trg
- The quantifiable success measure was the improvement in score between the first and second test
- Student perceptions were gauged by questionnaire
- Injuries were recorded through CF medical system and course records









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PT Test

- Designed to Gauge the physical capacities of the students across a wide range of general physical skills.
- Developed by PSP and Inf Sch
- Used AFM "fitness checks" (hybrid)
- Each test stand was supervised by Crse DS
- Staff evaluated only one test stand to ensure standardization
- Students identified by numbers only
- Events:
 - Sit-up
 - Push-ups
 - Squats/Deadlifts
 - Pull-ups
 - 2.4 km run





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TRAINING FOR COMBAT

 Our soldiers need realistic training...where commanders use all the available allocated resources to TRAIN AS WE INTEND TO FIGHT.

B-GL-300-008, Training Canada's Army









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AOFP Test- HELEN

- Designed to Gauge the physical capacities more closely associated with combat operations.
- Developed by CrossFit and Inf Sch
- Use hybrid HELEN workout
- Each Cndt evaluated by a Crse DS 1:1 ratio
- Students identified by numbers only
- Event:
 - 400m sprint
 - 15 swings @ 40 lbs
 - 10 pull-ups

Three rounds for time



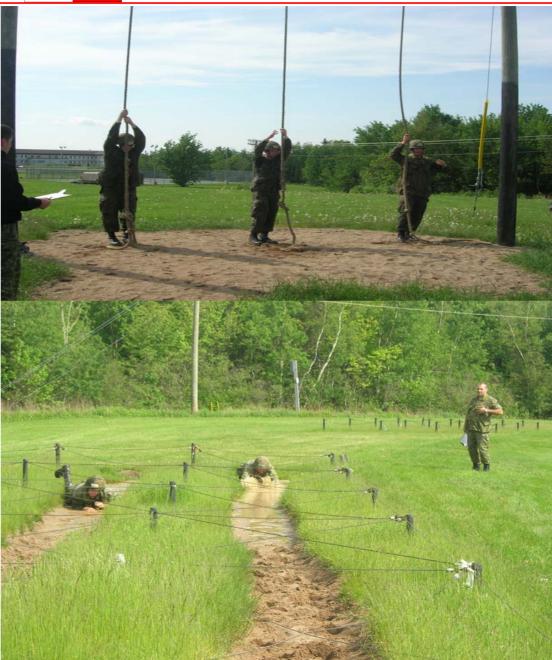


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Obstacle Course Test

- Tested separately
- Aim was to gauge ability to perform an event that coupled cardio and strength
- Individual performance for fastest time
- Three attempts per obstacles without one minute penalty
- Dress CADPAT, Kevlar, and gloves
- 20 obstacles to complete the crse





PT Test 12 July 06

Results PT Test

PT #	Sit-up	Push-up	Deadlift	Pull-up	2.4	Seconds	Score	Dif
1	74	67	77	11	10:45	645	102	43
2	80	78	77	17	8:59	539	123	37
3	78	71	56	6	9:33	573	91	38
4	88	53	65	8	8:59	539	97	37
5	78	78	65	9	11:04	664	99	41
6	76	59	54	5	10:59	659	78	33
7	58	63	64	9	10:32	632	82	24
8	63	61	47	8	11:10	670	70	24
9	70	71	71	11	10:53	653	98	26
10	62	33	55	0	11:04	664	46	18
11	64	51	61	10	12:07	727	73	18
12	88	53	68	5	9:29	569	94	43
13	Light Duties							
14	45	61	40	4	11:00	660	56	12
15	72	61	52	6	9:41	581	79	5
16	62	55	62	4	9:41	581	75	13
17	90	78	64	14	12:44	764	104	32
18	96	78	77	8	11:37	697	114	29
19	68	69	52	12	10:48	648	84	19
20	76	37	53	3	9:27	567	65	27
21	66	57	49	6	11:14	674	68	0
22	98	63	66	5	9:44	573	103	NA
23	92	78	70	9	12:26	573	105	NA
Average	73	62	60	8	10:30	635	85	25
Average Increse	8 (65)	14 (48)	20 (40)	2 (6)	(-) .40	(-) .40	25 (60)	

Results AOFP Test

Test 1: 02 Jun 06				Test 2: 13 July 06				
PT #	Time	Seconds	DNF	Time	Seconds	DNF	Dif Min	Dif Sec
1	15:30	930		9:30	570		6:00	360
2	11:13	673		8:01	481		3:12	192
3	14:25	865		11:03	663		3:22	202
4	14:16	856		9:34	574		4:42	282
5	12:05	725		10:45	645		1:20	80
6			16:31 PU/SW	13:05	785	****	****	
7	14:01	841		11:24	684		2:37	157
8	27.30	1650		11:39	699		15:51	951
9	11:42	702		10:45	645		0:57	57
10	16:58	1014		LD	LD	LD	LD	LD
11	13:58	838		11:10	670		2:48	168
12	16:05	965		13:27	807		2:38	158
13	12:45	765		LD	LD	LD	LD	LD
14	21:45	1305		14:50	890		6:55	415
15	16:30	990		9:50	590		6:40	400
16			17:44 PU/SW	13:00	780	****	****	
17	10:06	606		9:06	546		1:00	60
18	12:57	777		9:50	590		3:07	187
19	13:15	795		9:50	590		3:25	205
20	15:37	937		14:25	865		1:12	72
21	12:04	724		10:16	616		1:48	108
22	NA	NA		8:55	535		NA	NA
23	NA	NA		9:39	579		NA	NA
Average	14:53	893	17:20	10:57	657		3:56	236



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Results Obstacle Crse Test







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AOFP Austere Results

- The AOFP Austere Group made substantial increases in all evaluated events, with shorter workouts and no commercial gym equipment
- The AOFP group obtained increased aerobic gains while performing limited medium distance running and no long distance running
- The increased education level of the AOFP instructors assisted in the performance of the AOFP group

1: Less Time 2: Enhanced Gains 3: Soldier Enjoyment 4: Austere Eqpt





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Summary of Statistical Analysis

- Data supports results from DP1.2 and CAP trial conducted in 2005 that AOFP/CrossFit induces greater leg and core strength
- Equal or greater cardiovascular improvements while performing limited running
- Increase strength gains (pressing)
- In every event the AOF Austere Program had a significant increase in performance





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Explanation of Results

- Results suggest Austere AOFP groups either matched or out performed the CrossFit/AFM trial groups 2005
- These results could be due to any of the following factors or a combination of them:
 - Level of instructor education
 - Wider exercise repetition range
 - Greater technique emphasis
 - Functionality of movement
 - High intensity
 - Competition and effort
 - Previous use of CrossFit by cndts





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THE IMPORTANCE OF FITNESS

 Day by day in temperatures of 120 degrees, the battalion inched forward. The tankers fought with IV needles inserted into their arms. Every three hours they got out of their tanks and lay on stretchers while pints of liquid flowed back into their veins. Once rehydrated, they went back into the fight.

No True Glory, Bing West. 2005









Student Perceptions

- 1 Platoons of DP 1.2 crse provided input
- Questionnaire conducted after completion of all physical testing
- Purpose was to provide the candidates with an anonymous forum to obtain their feed back on the PT program they were utilizing
- General rating scale and open-ended questions were used
- 18 questions were asked.



9 key responses



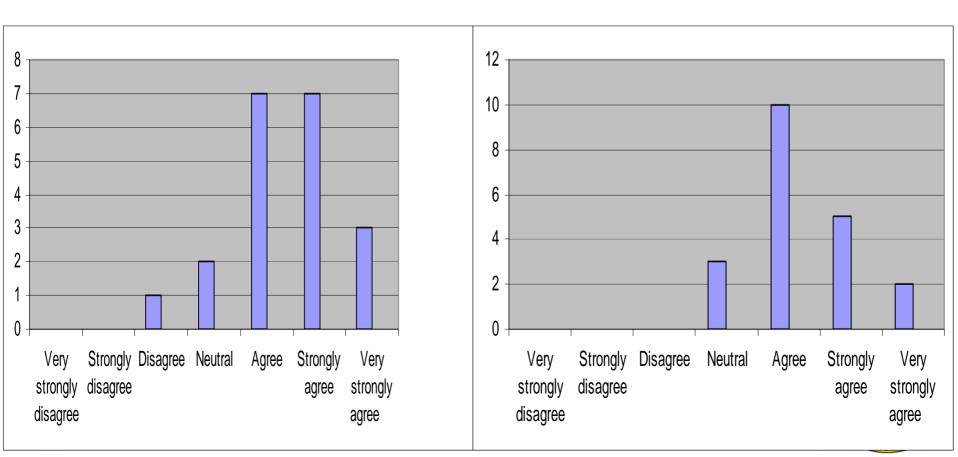


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Student Perceptions

<u>Program Safety:</u> I feel that the training I participated in was safe.

Field Applicability: I feel the activities performed during the physical training sessions were related to the types of tasks performed in a field environment.



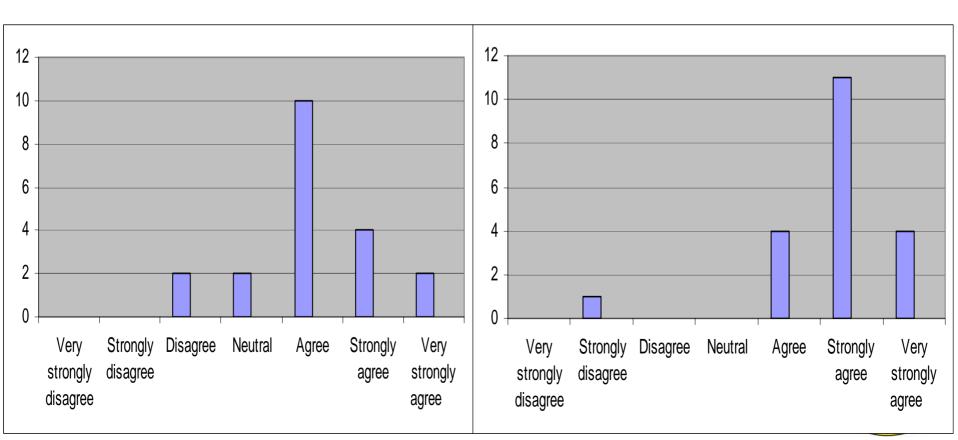


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Student Perceptions

Field Preparation: I feel the PT sessions have prepared me physically for the field.

Program Challenge: The PT sessions were challenging.



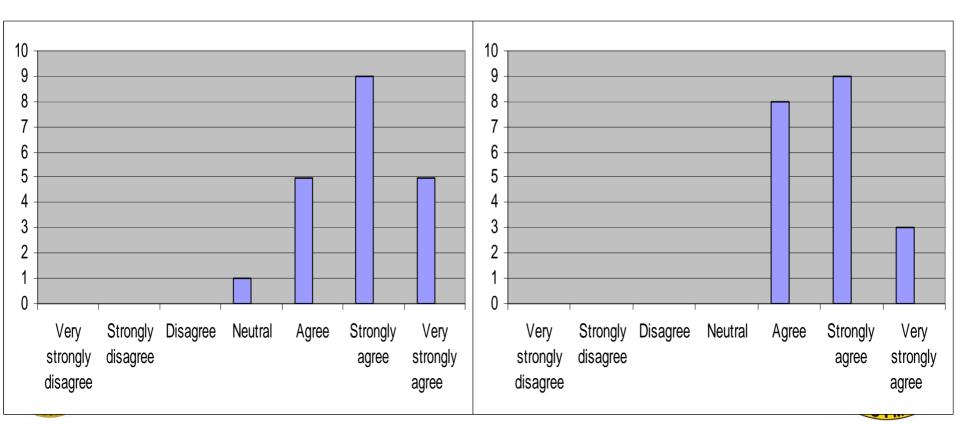


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Student Perceptions

Program Enjoyment: I enjoyed performing the PT sessions.

Logistics: 11. Logistically, this program is realistic for army group PT

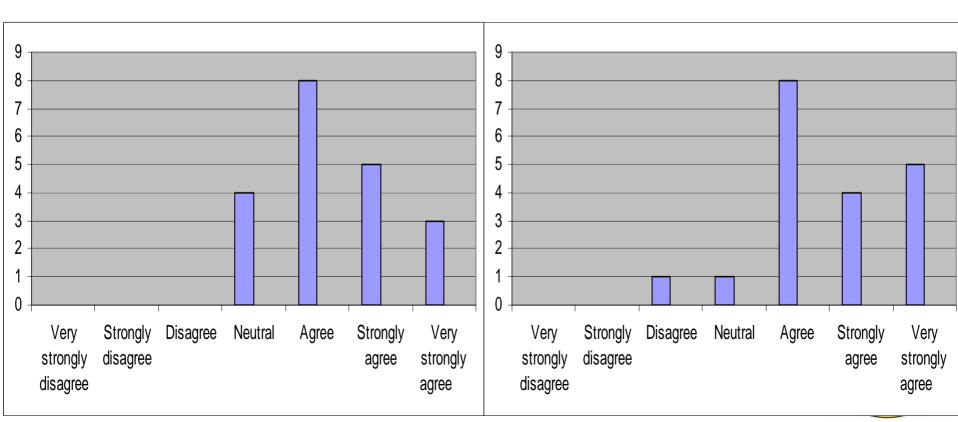




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Student Perceptions

<u>Program Motivation:</u> The program motivated me to improve my personal fitness.. **Program Use:** I would use this fitness program to train my soldiers.

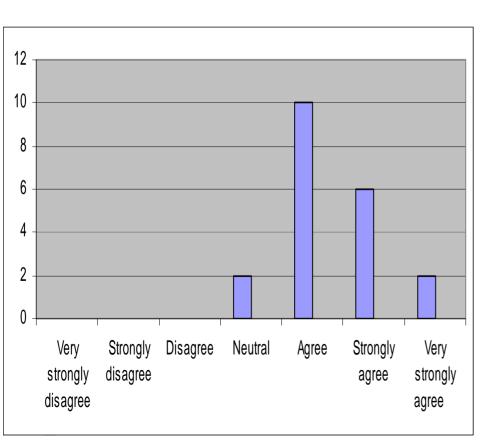




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Student Perceptions

<u>Personal Use:</u> I would choose this program as my personal physical fitness program.



Overall PROs:

- a. Intensity;
- b. Quick workouts, anywhere, anytime;
- c. Total body workout;
- d. Relevance to profession;
- e. Challenge; and
- f. Competition

Overall CONS:

- a. longer runs for cardio;
- b. 2 pers believe that competition is detrimental for trg;
- c. Instr participation;
- d. 1 pers believes movements are unsafe; and
- e. More sports





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Austere Gym: Falujah





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Injury Rate

- Important measure of program quality
- Data obtained for Return to Unit (RTU) students
- Must have completed the initial PT test
- Injury during PT, or a physical activity in garrison or in the field
- Chronic injuries were assessed as "non-attributable and attributable"
- Any injury not attributed to physical conditioning was not recorded, ie ear injury





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Injury Results and Analysis

- DP1.2 0601: 1 x light duties for five days (strained shoulder climbing a rope)
- DP1.2 0602: 1 x light duties for 14 days (arrived with injury)
 - No candidate received a medical RTU injuries related to the program





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Flexibility - Austere Equipment





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Risk Management

- Increased education (one week of instruction)
- Pass Level 3 AFM before moving on to AOFP.
- Ease into program (scale WODs first week)
- Supervision of fitness training by qualified pers
- Questionnaire based on Dr. Menard's direction wrt Rhabdomyolysis
- Requirement of COE (LL Iraq and Afghanistan)







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The Way Ahead

- DP 1.2 use austere AOFP during the crse
- DP 1.2 2007 will be able to use cndts to lead instruction during second week of AOFP (received AFM training on CAP 06)
- Obtain more CrossFit certified Inf Sch instr (esp young SNCOs). The officer DS education level was a key to success for the program.
- Continue to compile stats on the program
- OIC and SME AOFP Cell lead for DP 1.2 Austere Program
- Obtain more austere and regular eqpt for Trg Coys





Questions







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Austere Workouts





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Austere Advantage

